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FILE COVERS 1907 - 16 Apr 2002  VOL 136 ISS 16
FILE LAST UPDATED: 14 Apr 2002  (20020414/ED)

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Numbers with the P indicator executed between 12/27/01 and 1/23/02 may
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=> d stat que
L1            2 SEA FILE=REGISTRY GLUCOSE/CN
L2         2797 SEA FILE=REGISTRY HEMOGLOBIN/BI OR HEMOGLOBINS/BI
L3       340689 SEA FILE=HCAPLUS L1 OR GLUCOSE?
L5       134557 SEA FILE=HCAPLUS (ANALYTE? OR L3) AND (DETERMINATION OR DETN
                OR MEASUR? OR LEVEL?)
L6          267 SEA FILE=HCAPLUS L5 AND HAIR?
L7            1 SEA FILE=HCAPLUS L2 AND L6


=> d ibib abs hitrn l7

L7   ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         1986:511307  HCAPLUS
DOCUMENT NUMBER:          105:111307
TITLE:                    Clinical application of glycosylated proteins
                          (fructose-lysine) in diabetic patients
AUTHOR(S):                Oimomi, Munetada; Kitamura, Yoshiaki; Nishimoto,
                          Shigeki; Matsumoto, Shinichiro; Hatanaka, Hiroshi;
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Ishikawa, Kazuo; Baba, Shigeaki
CORPORATE SOURCE: Sch. Med., Kobe Univ., Kobe, 650, Japan
SOURCE: Dev. Food Sci. (1986), 13(Amino-Carbonyl React. Food Biol. Syst.), 475-80
CODEN: DFSCDX; ISSN: 0167-4501
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Samples of erythrocytes, plasma, **hair**, and nails were hydrolyzed with HCl at 95.degree. for 30 h, and furosine, a product of hydrolysis of N.epsilon.-(1-deoxyfructosyl)lysine, was detd. by HPLC on a TSK-Gel ODS 120-T column (4.6 mm .times. 25 cm) with phosphate buffer and UV detection at 280 and 254 nm. Diabetic patients had significantly higher furosine **levels** of plasma protein, Hb, nail protein, and **hair** protein than did healthy subjects. The glycosylation of plasma protein, Hb, and nail protein reflected blood **glucose** control for 1-2 wk, 1 mo, and 3-5 mo, resp., prior to sampling. The furosine content in **hair** protein could become an indicator of blood **glucose** control at any time in the past. Apparently, detns. of glycosylation of tissue proteins may offer an indication of previous blood **glucose** control in diabetic patients.
IT **9062-63-9**
RL: ANT (Analyte); ANST (Analytical study)
(**detn.** of, in diabetes in human by furosine **detn.**, blood **glucose** control in relation to)

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=> d stat que
L1             2 SEA FILE=REGISTRY GLUCOSE/CN
L2          2797 SEA FILE=REGISTRY HEMOGLOBIN/BI OR HEMOGLOBINS/BI
L3        340689 SEA FILE=HCAPLUS L1 OR GLUCOSE?
L4         61484 SEA FILE=HCAPLUS L2 OR HEMOGLOBIN?
L5        134557 SEA FILE=HCAPLUS (ANALYTE? OR L3) AND (DETERMINATION OR DETN
                 OR MEASUR? OR LEVEL?)
L6           267 SEA FILE=HCAPLUS L5 AND HAIR?
L7             1 SEA FILE=HCAPLUS L2 AND L6
L8          2101 SEA FILE=HCAPLUS L5 AND (INTERSTITIAL(W)FLUID? OR NONBLOOD(W)CO
                 MPONENT? OR CONSTITUENT?)
L9           808 SEA FILE=HCAPLUS L8(L)BLOOD?
L10           74 SEA FILE=HCAPLUS L4 AND L9
L11           74 SEA FILE=HCAPLUS L10 NOT L7
L12           11 SEA FILE=HCAPLUS L11 AND (KIT OR TEST?)


=> d ibib abs hitrn l12 1-11

L12 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:88092 HCAPLUS
DOCUMENT NUMBER: 136:196522
TITLE: The use of hirudin as universal anticoagulant in haematology, clinical chemistry and blood grouping
AUTHOR(S): Menssen, Hans D.; Melber, Karl; Brandt, Natascha; Thiel, Eckhard
CORPORATE SOURCE: Department of Internal Medicine III Haematology,
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Oncology and Transfusion Medicine, Universitatsklinikum Benjamin Franklin, Berlin, Germany
SOURCE: Clinical Chemistry and Laboratory Medicine (2001), 39(12), 1267-1277
CODEN: CCLMFW; ISSN: 1434-6621
PUBLISHER: Walter de Gruyter GmbH & Co. KG
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Undesirable interactions between anticoagulants and diagnostic **test kit** procedures so far have prevented the development of a single uniform **blood** sampling tube. Contrary to K2-EDTA, heparin and other anticoagulants, hirudin only minimally alters **blood** cells and dissolved **blood constituents**, thus qualifying as a universal anticoagulant for diagnostic purposes. Automated complete **blood** counts, automated analyses of clin. chem. **analytes** and immunohaematol. were performed from hirudinised and routinely processed **blood** obtained from healthy volunteers (n=35) and hospitalised patients (n=45). Hirudin (400 ATU/mL **blood**) sufficiently anticoagulated **blood** for diagnostic purposes. The **measurements** of automated complete **blood** counts obtained from K2-EDTA-anticoagulated and hirudinised **blood** correlated significantly as did the **measurements** of 24 clin. chem. **analytes** from hirudinised plasma and serum. Regression anal. revealed that the results of complete **blood** counts and clin. chem. **tests** were predictable from the resp. **measurements** from hirudinised **blood** (p=0.001). Immunohaematol. **tests** and cross-matching from hirudinised and native **blood** of the same donors gave identical results. Single clotting factors, but not global coagulation **analytes**, could be **measured** from hirudinised **blood**. Therefore, a universal hirudin-contg. **blood** sampling tube could be designed for automated anal. of haematol., serol. and clin. chem. **analytes**.
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:399137 HCAPLUS
DOCUMENT NUMBER: 129:132360
TITLE: Confirmation of in situ exposure of fish to secondary treated bleached-kraft mill effluent using a laboratory simulation
AUTHOR(S): Soimasuo, Markus R.; Lappivaara, Jarmo; Oikari, Aimo O. J.
CORPORATE SOURCE: Department of Biological and Environmental Science, University of Jyvaskyla, Jyvaskyla, 40100, Finland
SOURCE: Environ. Toxicol. Chem. (1998), 17(7), 1371-1379
CODEN: ETOCDK; ISSN: 0730-7268
PUBLISHER: SETAC Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To corroborate the responses in whitefish (Coregonus lavaretus L.) exposed to elemental chlorine free (ECF) bleached-kraft pulp mill effluent (BKME)

in situ, a 30-d lab. exposure was carried out at concns. simulating the field conditions. The flow-through exposures were conducted at four secondary (activated sludge) treated effluent (STE) concns.: 1.3, 2.3, 3.5, and 7%. To evaluate the role of the secondary treatment, fish were also exposed to one concn. (3.5%) of pretreated effluent (PTE) from the mill. Compared to the control, whitefish liver 7-ethoxyresorufin O-deethylase (EROD) activity was twofold in fish exposed to 3.5% STE, which was similar to monooxygenase induction in the field at the same effluent diln. The exposure to 3.5% PTE caused a 12-fold relative induction in whitefish. The activity of pentoxyresorufin dealkylase showed a high correlation with EROD activity ($r2 = 0.85$, $p < 001$). The plasma concn. of 17.beta.-estradiol was reduced by 37% ($p < 005$) in fish exposed to 3.5% STE, whereas **testosterone** was reduced by about 40% ($p < 0.05$) in fish in both 3.5% STE and PTE groups. The accumulation of chlorophenolics (CPs) and resin acids (RAs) in the bile of the fish was negligible at the three lowest STE concns. reflecting the nearly nondetectable **levels** of CPs and RAs in secondary treated whole effluent. The **measured blood** parameters plasma IgM, **glucose**, Hb, and hematocrit were not affected by effluent exposure. The responses obtained from the lab. simulation well accorded with the exposures in the field, although signs of reproductive impairment could be detected in the lab. Overall, however, it is evident that the improvements to mill processes and wastewater treatment have substantially reduced the load of harmful **constituents** in bleached kraft mill effluent and biol. impacts in the receiving environment.

IT **50-99-7**, **Glucose**, biological studies
RL: BOC (Biological occurrence); BIOL (Biological study); OCCU (Occurrence)
(confirmation of in situ exposure of fish to secondary treated bleached-kraft mill effluent using lab. simulation)

L12 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:39446 HCAPLUS
DOCUMENT NUMBER: 128:124565
TITLE: Biomarker responses in whitefish (Coregonus lavaretus L. s.l.) experimentally exposed in a large lake receiving effluents from pulp and paper industry
AUTHOR(S): Soimasuo, M. R.; Karels, A. E.; Leppanen, H.; Santti, R.; Oikari, A. O. J.
CORPORATE SOURCE: Dep. Biological & Environmental Sci., Univ. Jyvaskyla, Jyvaskyla, FIN-40351, Finland
SOURCE: Arch. Environ. Contam. Toxicol. (1998), 34(1), 69-80
CODEN: AECTCV; ISSN: 0090-4341
PUBLISHER: Springer-Verlag New York Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Physiol. and biochem. biomarker responses were studied in juvenile whitefish (Coregonus lavaretus L. s.l.) exposed exptl. to effluent from the forest industry. The large study area (609 km2), Southern Lake Saimaa, in Southeast Finland, receives 330,000 m3 d-1 of biol. and 55,000 m3 d-1 of chem. treated effluents, discharged from two integrated elementary chlorine free (ECF) bleached kraft pulp and paper mills, from one ECF pulp mill, and from one mill producing unbleached pulp and cardboard. The assessment of exposure to effluent discharged from the

mills was based on lake water chlorophenolics (CPs) and resin acids (RAs) **measured** in samples collected from the 22 exptl. sites along the area. Despite the low **levels** of effluent **constituents** in the lake, they were still accumulated in detectable **levels** in fish bile, indicating an exposure to the bioactive compds. of effluents. In comparison to the ref. area, a two- to four-fold increase in ethoxyresorufin O-deethylase (EROD) activity was obsd. in whitefish exposed in the vicinity (1-6 km) of all the mills. However, cytochrome P 450 1A1 (CYP1A1) gene expression was increased in only one of the receiving areas, indicating higher sensitivity of the EROD activity in the present study. There were no statistically significant correlations between EROD activity and the ambient water concns. of the CPs, the RAs, or effluent diln. expressed by water sodium concn. Neither bile chlorophenolics nor bile resin acids showed a significant correlation with EROD. No significant changes in circulating reproductive steroids, 17.beta.- estradiol and **testosterone**, in juvenile whitefish were obsd. The vitellogenin gene was expressed in the vicinity of the pulp mill discharging the most wood-derived compds., i.e. resin acids and wood-sterols, including .beta.-sitosterol. No differences were obsd. in plasma IgM, **glucose**, or lactate concns. between the effluent sources.

IT **50-99-7, Glucose**, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(**blood**; biomarker responses in whitefish (Coregonus lavaretus L. s.l.) exptl. exposed in a large lake receiving effluents from pulp and paper industry)

L12 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:759158 HCAPLUS
DOCUMENT NUMBER: 123:138186
TITLE: Non-spectrophotometric **measurement** of **analyte** concentrations and optical properties of objects
INVENTOR(S): Sodickson, Lester; Block, Myron J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 24 pp. Cont.-in-part of U.S. 5,321,265.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5434412	A	19950718	US 1993-130257	19931001
US 5321265	A	19940614	US 1992-914265	19920715
WO 9402837	A1	19940203	WO 1993-US6461	19930708
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 650591	A1	19950503	EP 1993-917056	19930708
EP 650591	B1	20000412		
R: BE, CH, DE, ES, FR, GB, IE, IT, LI, NL, SE				
EP 967478	A1	19991229	EP 1999-202777	19930708
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE, IE				

ES 2146232	T3	20000801	ES 1993-917056	19930708
US 5424545	A	19950613	US 1994-182572	19940114
CA 2173200	AA	19950413	CA 1994-2173200	19940926
WO 9510038	A1	19950413	WO 1994-US10836	19940926
W: AU, CA, JP, KR, NO, NZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9478428	A1	19950501	AU 1994-78428	19940926
AU 689137	B2	19980326		
EP 721579	A1	19960717	EP 1994-929335	19940926
EP 721579	B1	20000315		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 09503585	T2	19970408	JP 1994-510854	19940926
EP 967477	A1	19991229	EP 1999-202609	19940926
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
ES 2145843	T3	20000716	ES 1994-929335	19940926
US 5818048	A	19981006	US 1994-333758	19941103
US 5818044	A	19981006	US 1995-383293	19950202
US 6222189	B1	20010424	US 1998-73575	19980506
US 6028311	A	20000222	US 1998-137857	19980821

PRIORITY APPLN. INFO.:	US 1992-914265	A2	19920715
	EP 1993-917056	A3	19930708
	WO 1993-US6461	W	19930708
	US 1993-130257	A	19931001
	US 1994-182572		19940114
	US 1994-207871	B2	19940308
	EP 1994-929335	A3	19940926
	WO 1994-US10836	W	19940926
	US 1994-333758	A2	19941103
	US 1995-479955	A3	19950607
	US 1997-937934	A2	19970925

AB Improvements in noninvasive detection methods for **glucose** and other **constituents** of interest in a sample were developed. The app. and methods of the invention provide an analog of color perception of human vision, preferably in the near IR region, replacing spectrophotometers and narrow band sources used in other noninvasive near IR detection methods. A plurality of detector units are used, each covering a broad and overlapping region of the detected spectrum, paralleling color perception and colorimetry. The improvements are primarily concerned with improving the signal-to-background (or noise) ratio such that the data stream is improved. These improvements use congruent sampling, comparison of different data streams from different sample portions or filter sets, using an interrogation system with sufficient speed to allow **testing** of arterial **blood**, and using a filter with a spectral structure. In some circumstances, a neural net is used for anal., allowing the system to learn. A novel method for background discrimination is also described.

IT **50-99-7, Glucose**, analysis
RL: ANT (Analyte); ANST (Analytical study)
(non-spectrophotometric **measurement** of **analyte** concns. and optical properties of objects)

L12 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:605710 HCAPLUS
DOCUMENT NUMBER: 123:5154

TITLE: Non-spectrophotometric **measurement** of **analyte** concentrations and optical properties of objects
INVENTOR(S): Block, Myron J.; Sodickson, Lester
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9510038	A1	19950413	WO 1994-US10836	19940926
W: AU, CA, JP, KR, NO, NZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5434412	A	19950718	US 1993-130257	19931001
US 5424545	A	19950613	US 1994-182572	19940114
AU 9478428	A1	19950501	AU 1994-78428	19940926
AU 689137	B2	19980326		
EP 721579	A1	19960717	EP 1994-929335	19940926
EP 721579	B1	20000315		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 09503585	T2	19970408	JP 1994-510854	19940926
CA 2180128	AA	19950720	CA 1995-2180128	19950109
WO 9519562	A1	19950720	WO 1995-US265	19950109
W: CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 742897	A1	19961120	EP 1995-907352	19950109
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
JP 09510884	T2	19971104	JP 1995-519070	19950109

PRIORITY APPLN. INFO.:

US 1993-130257	A	19931001
US 1994-182572		19940114
US 1992-914265	A2	19920715
WO 1994-US10836	W	19940926
WO 1995-US265	W	19950109

AB Improvements in non-invasive detection methods for **glucose** and other **constituents** of interest in a sample have been developed. The app. and methods of the invention provide an analog of color perception of human vision, preferably in the near IR region, replacing spectrophotometers and narrow band sources used in other non-invasive near IR detection methods. A plurality of detector units are used, each covering a broad and overlapping region of the detected spectrum, paralleling color perception and colorimetry. The improvements are primarily concerted with improving the signal-to-background (or noise) ratio such that the data stream is improved. These improvements use congruent sampling, comparison of different data streams from different sample portions or filter sets, using an interrogation system with sufficient speed to allow **testing** of arterial **blood**, and using a filter with a spectral structure. In some circumstances, a neural net is used for anal., allowing the system to learn. A novel method for background discrimination is also described.

IT **50-99-7**, D **Glucose**, analysis

RL: ANT (Analyte); ANST (Analytical study)
(non-spectrophotometric **measurement** of **analyte** concns. and optical properties of objects)

L12 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1990:495308 HCAPLUS
DOCUMENT NUMBER: 113:95308
TITLE: Longitudinal study of hematological and biochemical **constituents** in **blood** of the Asian elephant (Elephas maximus)
AUTHOR(S): Niemuller, C.; Gentry, P. A.; Liptrap, R. M.
CORPORATE SOURCE: Dep. Biomed. Sci., Univ. Guelph, Guelph, ON, N1G 2W1, Can.
SOURCE: Comp. Biochem. Physiol., A: Comp. Physiol. (1990), 96A(1), 131-4
CODEN: CBPAB5; ISSN: 0300-9629
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hematol. parameters and biochem. **analytes** were detd. in elephants over a period of 1 yr. The hematol. profile remained const. over time and was similar between animals. Values for biochem. **analytes** were stable except for alk. phosphatase, .gamma.-glutamyl transferase, and creatinine which rose during musth in male elephants. The assocn. of elevated enzyme **levels** with increased **testosterone** concns. is discussed.

L12 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1982:213759 HCAPLUS
DOCUMENT NUMBER: 96:213759
TITLE: Exercise-induced changes in common laboratory **tests**
AUTHOR(S): Priest, John B.; Oei, Tjien O.; Moorehead, Wells R.
CORPORATE SOURCE: Sch. Med., Indiana Univ., Indianapolis, IN, 46223, USA
SOURCE: Am. J. Clin. Pathol. (1982), 77(3), 285-9
CODEN: AJCPAI; ISSN: 0002-9173
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effect of heavy exercise such as running on commonly obtained biochem. **tests** was examd. in serum of white male subjects with a mean age of 32 yr just prior to and immediately after a 13-mi mini-marathon. There was a statistically significant increase in the mean values of K, **blood** urea-N, creatinine, creatine kinase (CK), lactate dehydrogenase (LDH), aspartate aminotransferase, alk. phosphatase, bilirubin, uric acid, and leukocyte counts after the race. The erythrocyte count, Hb, and hematocrit were unchanged, suggesting no significant hemoconcn. due to fluid losses via perspiration or respiration. CK isoenzymes were normal both pre- and post-race, whereas all LDH isoenzymes increased significantly in post-race mean values, with the exception of isoenzyme 4.
IT **50-99-7**, analysis
RL: ANT (Analyte); ANST (Analytical study)
(**detn.** of, in human, exercise effect on)

L12 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1979:201327 HCAPLUS
DOCUMENT NUMBER: 90:201327
TITLE: The **blood** composition of cows in commercial dairy herds and its relationships with season and lactation
AUTHOR(S): Rowlands, G. J.; Little, W.; Stark, A. J.; Manston, R.
CORPORATE SOURCE: Inst. Res. Anim. Dis., Agric. Res. Counc., Compton/Newbury/Berks., Engl.
SOURCE: Br. Vet. J. (1979), 135(1), 64-74
CODEN: BVJOA9; ISSN: 0007-1935
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Blood** samples were taken from groups of lactating and nonlactating cows in dairy herds, which were sampled at 6-wk intervals during 2 consecutive yr. The **blood** samples were analyzed for packed cell vol., **blood glucose**, and Hb and for serum concns. of albumin, total protein, urea N, inorg. phosphate, Ca, Mg, K, Na, Cu, Fe, and total Fe-binding capacity. Packed cell vols. and concns. of urea N were highest during the summer mo of both yr. Concns. of Hb and Fe were significantly higher in the summer of the 1st but not the 2nd yr. The total Fe-binding capacity was higher in the summer of the 2nd yr, the 1 yr in which it was **measured**. Changes with season in the concns. of the other **constituents** were smaller and sometimes inconsistent between the 2 yr. Packed cell vols. and Hb concns. were consistently higher and concns. of Mg and Cu lower in nonlactating cows than in lactating cows. In summer and autumn, Fe concns. and total Fe-binding capacities in lactating cows were lower than those in nonlactating cows. Inorg. phosphate and Ca concns. in lactating cows were lower than those in nonlactating cows in summer and autumn, resp. For several **constituents** there were, regardless of season, differences among herds; these were most significant for Cu, albumin, and K. The influences of season, lactation, and herd are considered in relation to their possible incorporation in the definition of normal ranges of **blood** compn. for use in metabolic profile **testing**, and the conclusion is drawn that 1 std. range is adequate for the interpretation of metabolic profile results throughout the yr and, with the exception of Hb and packed cell vol., for both lactating and nonlactating cows.

L12 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1977:14516 HCAPLUS
DOCUMENT NUMBER: 86:14516
TITLE: The potential uses of metabolic profiles in the management and selection of cattle for milk and beef production
AUTHOR(S): Rowlands, G. J.; Manston, R.
CORPORATE SOURCE: Inst. Res. Anim. Dis., ARC, Compton/Nr. Newbury/Berkshire, Engl.
SOURCE: Livest. Prod. Sci. (1976), 3(3), 239-56
CODEN: LPSCDL
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A description is given of the Compton Metabolic Profile **Test**, which can be used as an aid in the prevention of metabolic problems in

dairy herds. It is based on an assessment of **blood** chem. of groups of animals in the herd, **blood** samples being analyzed for packed cell vol., **blood** Hb and **glucose**, and serum urea, albumin, total protein, inorg. phosphate, Ca, Mg, K, Na, Cu, Fe, and total Fe binding capacity. Consideration is given to the important factors which affect **levels** of these **constituents**: herd, season, milk yield, stage of lactation, and age, and the std. ranges of values used by the ARC Institute (England) are given. Studies of 3 different systems of husbandry at 1 center suggest that it may be possible to adapt the **test** to provide improved control of the health and nutrition of growing animals. There are further possible applications for the **test** in the selection of superior breeding stock. Preliminary results suggest that lactating dairy cows with lower than normal albumin concns. between 40 and 100 days after calving require more services per conception than those with normal concns. Animals which grow at a faster rate than others sometimes have high concns. of albumin, Hb, and **glucose** and low concns. of K.

L12 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1972:511106 HCAPLUS
DOCUMENT NUMBER: 77:111106
TITLE: Evaluation of some kits for determining **glucose**, urea, cholesterol, total proteins, and **hemoglobin**
AUTHOR(S): Ceriotti, G.; De Nadai-Frank, A.
CORPORATE SOURCE: Lab. Cent., Osp. Civ. Padova, Padua, Italy
SOURCE: Biochim. Appl. (1972), 18(5), 143-81
CODEN: BIALAY
DOCUMENT TYPE: Journal
LANGUAGE: Italian
AB Some of the Diagnostest kits prepd. by Dow were **tested** for **glucose**, urea, cholesterol, total serum proteins, and Hb. These kits cover a complete anal. procedure: the reagents are premeasured in optical glass cuvettes, where stds. and samples are introduced by calibrated glass capillaries with heating in a thermostatic block and readings were made in a filter colorimeter: both were supplied by Dow. The optical quality of the cuvettes and the stability of the colorimeter were checked first. Then for each **detn**. reproducibility expts. were performed with primary stds. controls, and patient sera. **Kit** methods were compared with those commonly used in the lab. and correlation coeffs. were calcd. Some possible sources of error specifically related to individual methods were considered and ways to avoid them were suggested.

L12 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1956:41404 HCAPLUS
DOCUMENT NUMBER: 50:41404
ORIGINAL REFERENCE NO.: 50:8006f-h
TITLE: Effect of orchiectomy upon chemical **constituents** of **blood** in young mature males, with special reference to sustained increase in the **level** of serum inorganic phosphorus
AUTHOR(S): Hamilton, James B.; Bunch, Leitha D.; Mestler, Gordon

E.; Imagawa, Richard
CORPORATE SOURCE: State Univ. of New York Coll. of Med., Brooklyn, NY
SOURCE: J. Clin. Endocrinol. and Metabolism (1956), 16, 301-21
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Chem. **constituents** of **blood** were detd. in 9 apparently healthy males, 18 to 38 years old, before and after castration. The av. serum inorg. P in the 9 subjects prior to castration was 3.45 mg. per 100 ml. From 15 to 1662 days after the removal of the **testes**, the av. value was 4.72 mg. inorg. P per 100 ml. serum. The increase was greatest in subjects who had low values before castration. The rise in serum inorg. P was statistically significant. Orchiectomy did not cause significant changes in the **levels** of serum Ca or other **blood** elements investigated (Na, K, uric acid, creatinine, **glucose**, pyruvic acid, lactic acid, cholesterol, lipide P, **hemoglobin**, total proteins, albumin, globulin and cholinesterase). Possible theories for the elevated serum inorg. P are discussed.